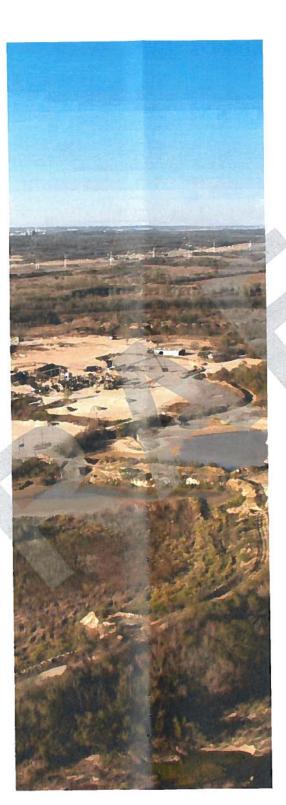
# Colorado River Corridor Plan

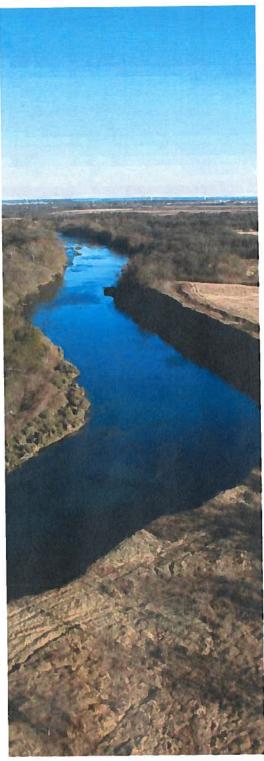
A Sustainable Future













Travis County, Texas | Transportation and Natural Resources, City of Austin & LCRA

#### **EXECUTIVE SUMMARY**

# Colorado River Corridor Plan Background

The purpose of the Colorado River Corridor Plan (Corridor Plan) is to coordinate regional and local planning to facilitate the preservation and enhancement of the many valuable environmental, economic, recreational, and cultural resources of this region over the next twenty-five years. It includes objectives for improved protection of local bio-diversity, preservation and restoration of floodplains and natural areas; the creation of parks, open spaces and greenways; enhancement of Corridor quality of life through the long-term restoration and reclamation of mined sites; and enhancement of mobility through capital project development and new design alternatives.

Plan implementation requires intergovernmental cooperation since multiple government entities are responsible for the various aspects of transportation, natural resource conservation, and environmental protection in the Corridor. The Corridor Plan is designed to improve collaboration at the regional and local level, and to enhance public understanding of the valuable resources of the Colorado River.

#### Study Area

The study area covers over 30,565 acres on a 32-mile stretch of the Colorado River in eastern Travis County, bounded by US 183 on the west, the Travis-Bastrop County line on the east, FM 969 on the north, and State Highway 71 on the south.

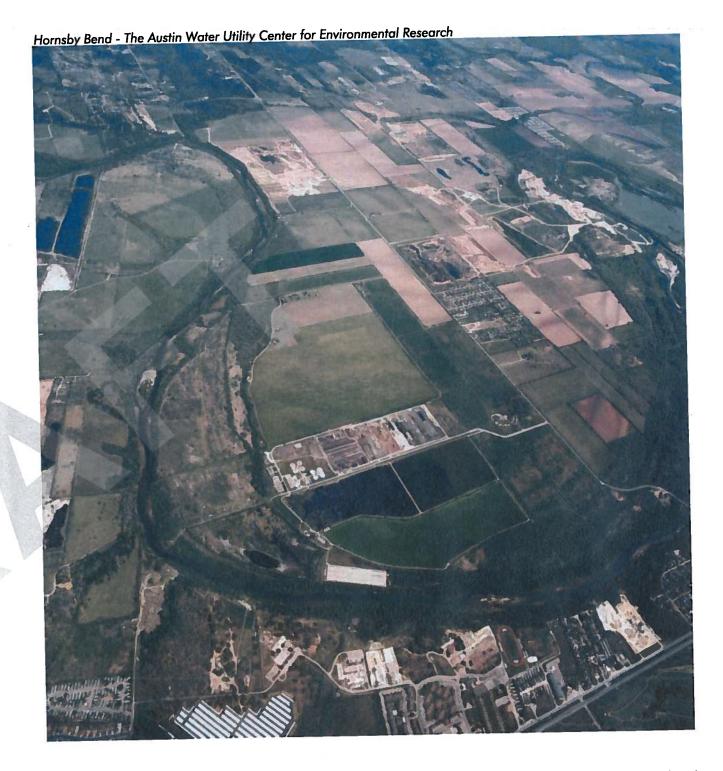
# **Existing Land Use**

The study area is comprised of the following land uses based on the 2008 City of Austin Planning and Development Review Department's land use inventory and the 2010 Travis County Appraisal District property category codes in the unincorporated region of the study area.

LAND USE		
Residential	2,927 Ac	9.6 %
Commercial	1,227 Ac	4.0 %
Civic/Institutional	1,802 Ac	5.9 %
Ag/Rural/Undeveloped	14,738 Ac	48.2 %
Recreation and Natural Areas	989 Ac	3.2 %
Mining	6,549 Ac	21.4 %
ROW & Colorado River	2,333 Ac	7.6 %

#### Public Involvement

Travis County, the City of Austin (COA), and the Lower Colorado River Authority (LCRA) have partnered in the development of this plan. The project team sought to identify priorities and concerns of stakeholders, and opportunities to proactively address these issues in the Colorado River Corridor.



The project was kicked off with a public meeting on December 7, 2010 at the Travis County East Service Center at which participants were asked to provide input on future development of the area and to discuss stormwater, water supply, transportation and environmental issues. The following topics were identified as issues of concern by the community:

· Implement environmental monitoring stations in residential neighborhoods.

- Demands on roads, schools, water and wastewater systems increasing cost to homeowners.
- · Preserve the community's rich culture and discourage suburbia development.
- Create a partnership to clean up the unsightly abandon mines along SH 130 and FM 969.
- Roadway flooding, isolating home sites, and preventing access for emergency vehicles.

The comments from the residents ranged from their desire to have more housing options in the area but they also wanted to maintain some of the low density that currently exists; however, they expressed how important it was for them to have the freedom to develop their property as they see fit. They would like the neighborhood to be safer and to see more children and parents walking to the Del Valle School. They would like to see the redevelopment of legacy mines that would include recreational activities that are accessible to the public and have the traffic corridors in the area to be free of blighted mining sites.

#### **Plan Elements**

The foundation of the Corridor Plan is the analysis of the following key elements.

- · Land Use
- · Water Quality and Water Supply
- · Transportation
- · Parks and Land Conservation

Some of the issues addressed within these elements include land use compatibility and transitioning from mining to subsequent uses over the next twenty-five years. Water resource management and protection are analyzed including stormwater and ground water. The corridors transportation system, traffic safety, and neighborhood connectivity are evaluated. Finally, parks and greenway systems and intensity of public use are explored.

#### 2010 Land Use

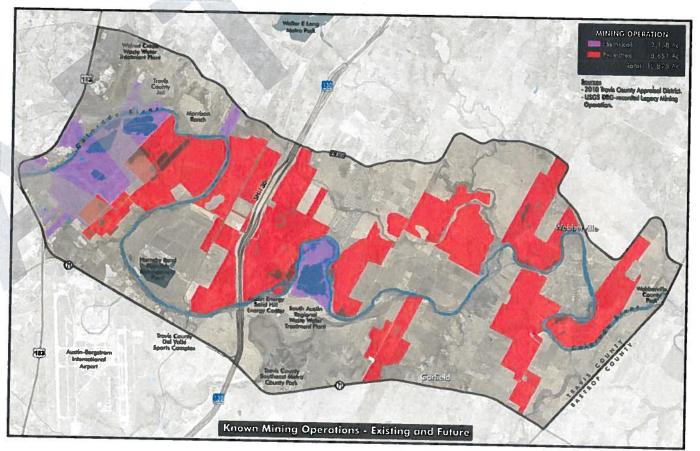
The study area consists of approximately 30,565 acres, and roughly 2,927 acres, 9.6 percent of the land area is currently identified as residential use. The area is experiencing an increase in residential development; however, the number of residential housing units is relatively small in comparison to other parts of the county. Approximately 14,738 acres, 48.2 percent of the study area is currently being utilized for agriculture and farm/ranch activity or is undeveloped and 1,227 acres, 4.0 percent, is identified as commercial land use. TCAD does not list mining operations within a specific land use category; however, there are 6,549 acres of active and inactive mining operations.

# Mining Issues

Increased development and mining operations occurring in rural areas spurred Travis County to consider development impacts on the rural lands and the quality of life. Specifically, the Corridor Plan identifies some of the critical issues facing the study area. Objectives to achieve the goals are located in the Implementation Strategies section 8 of the Corridor Plan. Each of the objectives detailed in the full plan is accompanied by action items (tools, policies and implementation), and a time frame for accomplishing each objective.

The study group understands that mining companies not only excavate materials for off-site construction, but are also interested in the long-term potential for the mined land tracts. Once the mining operations are completed, the land may re-purposed for new community uses. Large areas of the Corridor can thus transition from mining uses to future urbanized areas made up of schools, neighborhoods, and associated businesses and services, all integrated into a network of parks, greenbelts, and farmland. The design and implementation of these multifaceted systems of transportation form a major challenge and opportunity for the Corridor.

Travis County has the authority to promote the health, safety, and general welfare of the community. However, state law limits the County's land use and zoning authority. Therefore, it is important to have strong relationships and a shared set of planning objectives with other authorities, including municipal and local governments.



# Water Quality and Water Supply

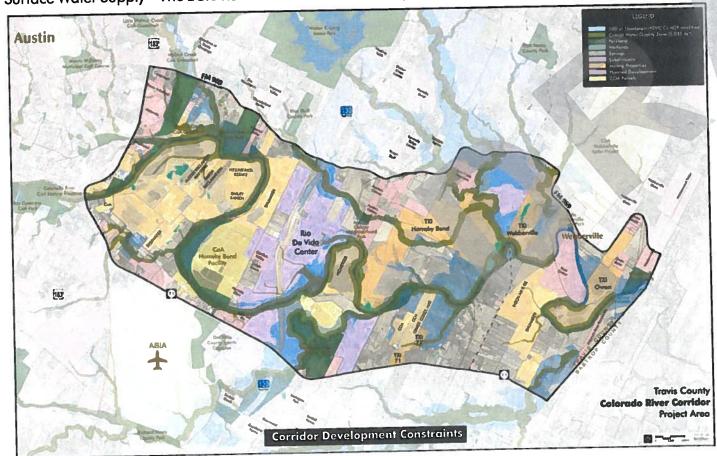
Surface Water Quality - The TCEQ surface water quality standards for the Colorado River downstream from Longhorn Dam establishes an "exceptional" aquatic life use for the river, meaning the aquatic system has the capability to support a highly diverse and abundant assemblage of fish and other aquatic life. While this use is considered as attained, TCEQ identifies concerns that this exceptional use could be threatened. The chief threat is urbanization, which has resulted in negative impacts to the surface water quality in the Colorado River and in other creeks and streams in the Corridor, including:

- · Pollutant discharges from treated effluent from sewage treatment facilities.
- · Increased quantity and decreased quality of stormwater runoff.
- · Illicit discharges of pollutants and toxins.
- · Overflows of untreated sewage.
- · Improperly managed animal waste
- Encroachment, alteration, and degradation of stream channels.
- Loss of size and natural condition of riparian areas.
- · Introduction of exotic species.

Groundwater Quality - Groundwater within the Corridor comes primarily from the Colorado River alluvial aquifer. Only limited data from studies or monitoring is available about this resource, primarily a single 1994 Austin Water Utility study of the quality of ground water at the Hornsby Bend Wastewater Sludge Treatment Facility. This study indicated that concentrations in excess of EPA drinking water maximum contaminate levels of nitrate-nitrogen and fecal coli form was found in wells throughout the facility. Concerns regarding groundwater quality in the Corridor include:

- Lack of systematic monitoring and water quality and quantity data for area wells.
- · Lack of hydrological studies of area groundwater.
- Extent and severity of excessive nitrate-nitrogen in the aquifer.
- · Lack of a coordinating Groundwater District.
- Lack of local studies on the impact of aggregate mining on water quality.

Surface Water Supply – The LCRA is the wholesale raw water provider in the Corridor. The City of Austin,



Hornsby Bend, Manville WSC, and Garfield WSC are the largest retail water providers. Nearly the entire Corridor is within Certified Water Service areas. Private water wells are numerous. The City of Austin and Hornsby Bend Utility Co. are the largest retail wastewater providers; however, existing wastewater infrastructure is limited east of SH 130. Critical issues regarding water and wastewater service include:

- Capital for water supply infrastructure to support the growing and expanding urban population in the Corridor will likely raise the cost of drinking water.
- Capital expenditures are necessary for non-potable, reclaimed wastewater infrastructure from area wastewater treatment plants to support turf and crop irrigation.
- Agricultural irrigation may not be cost-effective when droughts occur.
- Long-term water planning needs to consider the advantages and disadvantages of supplying water from multiple and smaller utilities vs. larger, more regionally-based utilities.

# Transportation

The Corridor is evolving from the primarily agricultural and gravel mining land uses that have predominated the area to areas of urban, suburban and rural residential. Significant population growth over the past decade has intensified the demand for new transportation improvements. Resulting growth has led to more traffic and congestion, increasing travel times within the Corridor. Residential areas, most notably Austin's Colony, have developed with limited mobility options which have created safety, environmental and economic impacts for local residents.

The Corridor Plan acknowledges that mobility issues will not be solved solely by building new roadways. Alternative modes of transportation, such as facilities for bikes, pedestrians and transit, are needed in addition to improvements to and an expansion of existing roadway networks. New design alternatives are needed within the Corridor that take advantage of the Corridor's rural character, help minimize environmental impacts and enhance the quality of life for Corridor residents.

# Issues related to mobility include:

- The Capital Area Metropolitan Planning Organization (CAMPO) 2035 transportation forecast shows limited growth in population and employment in its recent Plan update. However, recent proposed development plans within the Corridor suggest much higher population and employment numbers than the CAMPO forecast, resulting in the need for a more robustly planned transportation network for proposed future development.
- Transportation improvements are needed to address environmental and man-made constraints that currently pose barriers to Corridor connectivity.
- New transportation alternatives, such as facilities for bikes, pedestrians and transit are needed to provide for alternatives for work and recreational trips and for low-income residents impacted by high transportation costs.
- Design of new transportation infrastructure should capitalize on and protect the outstanding environmental features in the Corridor.
- Projects will compete for scarce funding sources which will require local jurisdictions to identify the most beneficial cost-effective improvements for mobility.

Parks and Land Conservation



Travis County and the City of Austin have approximately 1200 acres of parkland on the Colorado River and its tributaries that form the foundation of a corridor-wide park system centered on waterways (see Concept Plan below). The challenge to building a more comprehensive system that meets the needs of the growing population is acquiring land before it is slated for development or aggregate mining. The County and City will continue to employ strategies for timely acquisition of parkland that have worked in the past: fee simple acquisition, parkland dedication by ordinance, and landowner donation. The County's initiative to build greenways along Onion Creek and Gilleland creeks -- launched in 2005 with voter-approved bond funds -- is ongoing. A request for additional funds to acquire land and build recreational facilities is included in Travis County's preliminary list of projects for the upcoming 2011 bond election.

There haven't been initiatives, however, to conserve land for non-park purposes in the corridor as there have been in the western part of the county where the City and County have acquired land to protect endangered species habitat or water resources. The 2011 Texas State Legislature has given Texas counties authority, however, to purchase conservation easements. Travis County is already using this new authority, and is requesting funds in the 2011 bond package for this purpose. Easements will be purchased to protect water resources, working farms and ranches, wildlife habitat, scenic views, and other natural and cultural resources. The Corridor is a candidate area for acquiring land conservation easements.

The City and County are focusing on building greenways—linear parks with both recreational facilities and preserved natural areas—along Onion and Gilleland creeks and the Colorado River. The 1,222 acres of parkland currently on the Colorado River and tributaries is an excellent foundation. The County is building on this by acquiring parkland on waterways with 2005 park bond funds and requests additional funds in the proposed 2011 park bond package for this purpose. The City is also incorporating new parkland into the area's greenway system. Both the City and the County are also exploring improved creek protections that will strengthen opportunities for greenway systems.

#### The Concept Plan

The Colorado River Corridor Concept Plan presents a vision of an orderly transition between urban areas, neighborhoods, rural lands, and natural areas. It is a plan that accommodates new development while also protecting the character and environmental quality of the corridor.

Urban areas in the Concept Plan are sited along major highways – SH 130, SH 71, FM 973, and FM 969 – and are adjacent to neighborhoods. This relationship in which urban-intensity land abuts neighborhoods is consistent with CAMPO's "activity centers" concept: activity centers are more intensely developed than the surroundings; are a mix of employment, housing, and retail; are pedestrian-oriented with many destinations within walking distance; and are connected to surrounding neighborhoods and the region by a range of transportation options. With most new development concentrated in activity centers, large tracts of rural land are preserved. Reclaimed mining lands are also part of the inventory of undeveloped lands in the corridor.

Transportation corridors in the Concept Plan have been developed with new multi-modal mobility

opportunities that currently do not exist within the Corridor. Roadways that accommodate bikes lanes and sidewalks and a regional trails network are proposed to seamlessly connect throughout the area to move motorists, cyclists and pedestrians throughout the Corridor. It is envisioned that transit will be fully integrated within the Corridor and have connectivity to the Austin Bergstrom International Airport and the City of Austin's future Urban Rail stations. Congested roadways are planned to be improved and new connectivity created. FM 969 will become a focal parkway providing mobility as well as highlighting the visual character of the Colorado River Corridor. Other arterials will front along greenways to take advantage of the rural visual character that defines the Corridor. New connectivity is also highlighted in the Concept Plan, especially from residential areas east of SH 130. For example, new connections from Austin's Colony to FM 973 are provided as well as a new regional arterial that crosses the Colorado River connecting FM 969 with SH 71.

The envisioned corridor-wide parks and greenway system – centered on the Colorado River, Onion Creek, Gilleland Creek, and other smaller creeks – weaves together developed and undeveloped lands. The intent is to provide the growing population of the corridor with opportunities to enjoy recreational and natural resources close to where they live and to mitigate the environmental impacts of increased impervious cover in watersheds. Recreational facilities will be built at destination parks; boat ramps will be constructed at FM 973 and SH 130 river crossings and at the confluence of Onion Creek with the Colorado River; and long distance hike and bike trails will be developed along the length of the linear greenways. The large portions of the parks and greenway system maintained as natural areas will be scenic places where wildlife thrives. Bottomland woods, grasslands, and wetlands will also serve to capture and filter stormwater, recharge ground water, and mitigate flood damage.

# Rural Ru

With these land use patterns, new transportation opportunities, and corridor-wide parks and greenway system, people living and raising families within the Corridor will find it an inviting place to work, shop and live.

#### **GOALS AND OBJECTIVES**

The following Goals and Objectives provide a framework for the tools, policies, and implementation strategies of the Corridor Plan, as well as describe the underlying assumptions inherent in the Corridor Concept Plan Map.

The corridor concept plan and goals should:

Establish a unified concept across jurisdictional boundaries, while recognizing different corridor development contexts (e.g., urban versus rural);

Consider the range of social, economic, and environmental issues;

Reflect existing roadway designations (e.g., functional class, access management category, truck route, scenic byway);

Reflect existing policy documents such as local comprehensive plans and statewide and regional transportation plans;

Incorporate and reflect current public input about how local residents view their communities and the transportation corridor; and

Recognize the needs of those who may not be well-represented within the corridor planning process, such as through travelers from outside the study corridor or visitors.

# GOAL 1: Conserve and Protect Natural Resources

Protecting natural systems is critical to human, plant, and animal health and well-being. The concept of natural community planning calls for the protection of natural communities and habitats. Local governments are working to protect habitats from both a regulatory standpoint but just as important from reasonable incentives for private landowners. Both public and private sectors participate in land stewardship that can protect and manage natural resources. The following objectives support this goal.

- 1. Protect and manage natural areas.
- 2. Protect and manage water quality.
- 3. Integrate floodplain management with natural area preservation.
- 4. Enhance conservation of limited ground and surface water supplies.

# GOAL 2: Improve Quality of Life

Quality of life is an essential consideration in a person's decision to live in a community or a business' decision to locate there. In order to attract new residents as well as make the corridor desirable for those already living there, there is a need to provide an attractive physical environment for residents and visitors, as well as provide necessary services and facilities. The following objectives support this goal.

Parks and Greenways

- 1. Build a park system that is accessible and meets residents' needs.
- 2. Develop a comprehensive, interconnected system of parks and greenways within the corridor.
- 3. Enhance economic viability of parks and greenways.
- 4. Support sustainable operation and management of parks and greenways.
- 5. Develop the park and green space as a foundation in community development.

#### Corridor Character

- 1. Build high quality structures and public spaces in the time honored tradition of civic commitment to lasting public works.
- 2. Protect and enhance cultural and scenic resources.
- 3. Establish regional, village, and neighborhood identities.
- 4. Support school initiatives to maintain viable and safe school sites.

#### Health, Safety, and Welfare

- 1. Provide for safe and effective access for life safety services.
- 2. Develop a flood management strategy that provides better protection and preserves assets.
- 3. Enhance air quality.
- 4. Minimize and manage ambient noise and light.
- 5. Enhance availability of potable water and wastewater treatment.
- 6. Advance energy conservation.
- 7. Instill community resiliency.
- 8. Provide fair and equitable regulatory environment.

# GOAL 3: Provide improved mobility and transportation choices.

Transportation has and will have a profound impact on the corridor. Various travel modes not only respond to growth, they can also be a primary determinant to the patterns of growth and land use. Transportation investments can determine where and how we live.

Roads have a significant impact on the quality of the corridor. Roads can make up the majority of our public spaces. In some communities, roads and related infrastructure occupy more land than parks and greenspace. Therefore, we must plan and design our transportation system with consideration for those who live with it as well as those who use it. The following objectives support this goal.

# Mobility

- 1. Provide for efficient and safe highways and roadways.
- 2. Improve mobility, connectivity and access of people and goods.
- 3. Reduce congestion and improve air quality.
- 4. Ensure and preserve environmental, scenic, aesthetic, historic, and natural resource values.
- 5. Provide cost-effective opportunities in the development of transportation facilities.

# **Bicycles and Pedestrians**

1. Provide a connected network of non-motorized transportation facilities connected to local and regional destinations.

- 2. Provide a multi-use trail network that improves mobility as well as supports recreational opportunities.
- 3. Provide for safe and efficient connections throughout the corridor.
- 4. Transportation facilities should be designed to encourage bicycle and pedestrian usage.

#### **Transit**

- 1. Provide for public transit services that improve affordable and accessible transportation alternatives.
- 2. Encourage transit oriented development within Corridor Activity Centers.
- 3. Identify and implement strategies to take advantage of opportunities for new transit opportunities and connections within the corridor.

Based on various factors, including ease of implementation, agencies involved, and funding availability, the project team identified priority focus areas. Objectives to achieve the goals are found in the Implementation Strategies section. Each of the objectives detailed is accompanied by tools, policies and strategies, and a time frame for accomplishing each objective.

The Corridor Plan was developed in response to the need for a comprehensive plan that provides a vision and a framework for a positive long-range future for the Colorado River Corridor. At its heart, any plan for this area needs to acknowledge its unique and exemplary geographical and historic role for Austin and Travis County. This Plan is a first step. It will require periodic updates to account for changing community and resource protection needs and strategies as indicated by new information or research. And, finally, it is hoped that this Corridor Plan will also be of direct assistance in the development of the City of Austin's Imagine Austin Comprehensive Plan, which shares common goals for the Colorado River Corridor.